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| 10/608,193      | 06/30/2003  | Mark A. Nikiel       | MFCP.103967         | 8311             |

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| EXAMINER |
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THAI, HANH B

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| ART UNIT | PAPER NUMBER |
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2163

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/608,193

Applicant(s)

NIKIEL ET AL.

Examiner

Hanh B. Thai

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

This is in response to application filed June 30, 2003 in which claims 1-36 are presented for examination.

### **DETAILED ACTION**

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4, 6-12, 14-20, 22-29 and 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sim et al. (US Pub. 2002/0083187 A1) in view of Hickman et al. (US 6,523,036 B1).

Regarding claim 1, Sim discloses a database storage system for providing storage for metadata sets, each metadata set related to a file uploaded by a user over a network, the database storage system comprising:

- a plurality of database storage facilities ("storage devices" 711-713 read on "storage facilities", Fig7; ¶ [0087]-[0088], Sim) for storing the metadata sets (Fig.7; ¶ [0087]-[0088]; [0146] and [0099], Sim discloses local storages for storing metadata files to be uploaded in the network), each storage facility comprising at least two partitioned sections (abstract; summary; ¶[0078]; [0087]-[0088]; [0099]; [0146] and [0235], Sim discloses that the large payload file is portioned in multiple portions and storing these portions in storage locations "nodes"); and

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- a file management component for managing metadata storage in order to store each metadata set in more than one database storage facility (§ [0146] and [0099], Sim).

Sim does not explicitly disclose one logically partitioned section. Hickman discloses internet database system including logically partitioned section (abstract; summary; and col.8, lines 33-67, Hickman). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to add the logically partitioned section of Hickman into the distribution network of Sim to derive the invention as claimed because it would have been to obtain an efficient system and method that utilizes a more effective means for distributing a large files over a network (§ [0042], Sim).

Regarding claims 9 and 16, Sim discloses a method for providing storage for metadata sets for multiple users, each metadata set related to a file uploaded by a user over a network, the method comprising:

- dividing a plurality of database storage facilities into at least two logically partitioned sections (abstract; summary; § [0078]; [0087]-[0088]; [0146]; [0099] and [0235], Sim discloses that the large payload file is portioned in multiple portions); and
- managing metadata storage in order to store each metadata set in more than one database storage facility ([0146] and [0099], Sim).

Sim does not explicitly disclose one logically partitioned section. Hickman discloses internet database system including logically partitioned section (abstract; summary; and col.8, lines 33-67, Hickman). It would have been obvious to one of ordinary skill in the

art at the time of the invention was made to add the logically partitioned section of Hickman into the distribution network of Sim to derive the invention as claimed because it would have been to obtain an efficient system and method that utilizes a more effective means for distributing a large files over a network (§ [0042], Sim).

Regarding claims 2 and 10, Sim/Hickman combination discloses the database storage system of claim 1, further comprising file uploading and retrieval components for uploading files from the users and for retrieving the files and the metadata sets from the storage system (§ [0081]; [0085]; [0092] and [0116], Sim).

Regarding claim 3, Sim/Hickman combination discloses the database storage system of claim 1, wherein the uploaded files are image files and the metadata sets are image metadata sets (§[0098]-[0099] and [0243], Sim).

Regarding claims 4 and 12, Sim/Hickman combination discloses the database storage system of claim 1, further comprising a directory hierarchy that is transparent to the users (Fig.6 and §[0177], Sim).

Regarding claims 6 and 14, Sim/Hickman combination discloses the database storage system of claim 1, further comprising a file sharing component for allowing visitors to view the uploaded file (§ [0126]; [0175]-[0177], Sim).

Regarding claims 7 and 15, Sim/Hickman combination discloses the database storage system of claim 1, further comprising external storage space provided by a storage vendor system for storing uploaded files (“content vendor” § [0236], Sim).

Regarding claim 8, Sim/Hickman combination discloses the database storage system of claim 1, further comprising a partner system for incorporating uploaded image tiles in a product (§ [0175]-[0177], Sim).

Regarding claim 11, Sim/Hickman combination discloses the method of claim 9, further comprising receiving image files from the users and deriving image metadata sets (§ [0099]; [0146] and [0235], Sim).

Regarding claim 17, a network storage system for providing storage space for multiple users, the system comprising:

a file uploading component for uploading an image file from each user to the storage system, and for deriving an image metadata set related to the uploaded image file (§ [0099]; [0146] and [0235], Sim);

- a plurality of database storage facilities (“storage devices” 711-713, Fig. 7 read on “storage facility”; § [0087]-[0088], Sim) for storing each image metadata set (Fig. 7; § [0087]-[0088]; [0146] and [0099], Sim discloses local storages for storing metadata files to be uploaded in the network), each database storage facility including at least two logically partitioned sections (abstract; summary; § [0078]; [0087]-[0088]; [0099]; [0146] and [0235], Sim discloses that the large payload file is portioned in multiple portions); and
- a file management component for managing metadata storage in order to store each metadata set in more than one database storage facility ([0146] and [0099], Sim), and for directing the image file to an image storage facility (§ [0092]-[0094] Sim).

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Sim does not explicitly disclose one logically partitioned section. Hickman discloses internet database system including logically partitioned section (abstract; summary; and col.8, lines 33-67, Hickman). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to add the logically partitioned section of Hickman into the distribution network of Sim to derive the invention as claimed because it would have been to obtain an efficient system and method that utilizes a more effective means for distributing a large files over a network (§ [0042], Sim).

Regarding claims 26, 35 and 36, a method for storing user data for multiple users using a network storage system, the method comprising:

- uploading a data set from a user to the storage system, the data set including an image file (Fig.7; § [0087]-[0088]; [0146] and [0099], Sim discloses local storages for storing metadata files to be uploaded in the network);
- deriving image metadata from the dataset (§[0090]-[0092], Sim);
- storing the image metadata in logically partitioned sections of database storage facilities (abstract; summary; §[0078]; [0087]-[0088]; [0099]; [0146] and [0235], Sim discloses that the large payload file is portioned in multiple portions and storing these portions in storage locations “nodes”); and
- managing metadata storage in order to store each metadata set in more than one database storage facility ([0146] and [0099], Sim); and
- directing the image file to an alternate storage facility (§[0092]-[0094] Sim).

Sim does not explicitly disclose one logically partitioned section. Hickman discloses internet database system including logically partitioned section (abstract; summary; and

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col.8, lines 33-67, Hickman). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to add the logically partitioned section of Hickman into the distribution network of Sim to derive the invention as claimed because it would have been to obtain an efficient system and method that utilizes a more effective means for distributing a large files over a network (§ [0042], Sim).

Regarding claims 19 and 28, Sim/Hickman combination discloses the system of claim 17, further comprising a user information component including an identification mechanism capable of identifying a user through a user identifier (§[0083] and [0236], Sim).

Regarding claims 18 and 27, Sim/Hickman the file management component executes a hashing function in order to appropriately direct data to storage (abstract and summary of Hickman).

Regarding claims 20 and 29, Sim/Hickman combination discloses the system of claim 17, wherein each data storage facility includes at least three logically partitioned sections and each image metadata set is stored in three logically partitioned sections (abstract; summary; §[0078]; [0087]-[0088]; [0099]; [0146] and [0235], Sim).

Regarding claims 22 and 31, Sim/Hickman combination discloses that the database storage facilities comprise SQL machines (abstract and summary, Hickman).

Regarding claims 23 and 32, Sim/Hickman combination discloses the system of claim 17, further comprising a sharing function for allowing the users to share data with other users (§ [0121] and [0148], Sim).



Regarding claim 24, Sim/Hickman combination discloses the system of claim 23, further comprising a mechanism for terminating a link in order to stop sharing data with the other users (¶ [0111];[0114]-[0115], Sim).

Regarding claim 25, Sim/Hickman combination discloses the system of claim 17, further comprising database storage facilities in disparate locations (abstract; summary; ¶[0078]; [0087]-[0088]; [0099]; [0146] and [0235], Sim discloses that the large payload file is portioned in multiple portions and storing these portions in disparate storage locations “nodes”).

Regarding claim 33, Sim/Hickman combination discloses the method of claim 26, further comprising sending a first version of an encrypted link to initiate sharing (¶ [0121] and [0148], Sim).

Regarding claim 34, Sim/Hickman combination discloses the method of claim 26, further comprising invalidating the first version of the encrypted link in order to terminate sharing (¶ [0121] and [0148], Sim).

2. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sim et al. (US Pub. 2002/0083187 A1) in view of Hickman et al. (US 6,523,036 B1) and further in view of Vu (US Pub. 2004/0143582 A1).

Regarding claims 5 and 13, Sim/Hickman combination discloses all of the claimed limitations as discussed above, except a digital fingerprinting component for fingerprinting each uploaded file. Vu, discloses system and method for structuring data in a computer system including fingerprint component (Fig.4; ¶ [0031] and [0040], Vu). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize a fingerprint component of Vu into the combination system of Sim and Hickman to derive the invention as

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claimed. The motivation of doing so would have been to efficiently scan the information attached to the file to uniquely identify it (§ [0040], Vu).

3. Claims 21 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sim et al. (US Pub. 2002/0083187 A1) in view of Hickman et al. (US 6,523,036 B1) and further in view of Kerwin (US Pub. 2003/0212660 A1).

Regarding claims 21 and 30, Sim/Hickman combination discloses all of the claimed limitations as discussed above, except that wherein a first copy of the image metadata set is stored in read/write format and a second copy and a third copy are stored in read only format. Kerwin discloses database scattering system including the databases for storing read/write data format and read only format which maintained by system administrator (summary and § [0111], Kerwin). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to store copies of data in read/write format and read only format. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the claimed feature as taught by Kerwin into the combined system of Sim and Hickman. The motivation of doing so would have been to improve resource management and permit substantially simultaneous data access requests without undue expense in hardware (§ [0008], Kerwin).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Krishnamurthy (US 6,823,436 B2) discloses system for conserving metadata about data snapshots.

2. Schreiber et al. (US 6,341,333 B1) disclose method for transparent exchange of logical volumes in a disk array storage device.
  3. Baranovsky et al. (US 5,897,661) discloses logical volume manager and method having enhanced update capability with dynamic allocation of storage and minimal storage of metadata information.
  4. Aziz et al. (US 6,597,956 B1) disclose method and apparatus for controlling an extensible computing system.
  5. Milligan et al. (US Pub. 2004/0128269 A1) discloses system and method for managing data through families of inter-related metadata tables.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh B. Thai whose telephone number is 571-272-4029. The examiner can normally be reached on 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Hanh B Thai

Examiner

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December 9, 2005



**UYEN LE**  
**PRIMARY EXAMINER**